Missouri Botanical Garden

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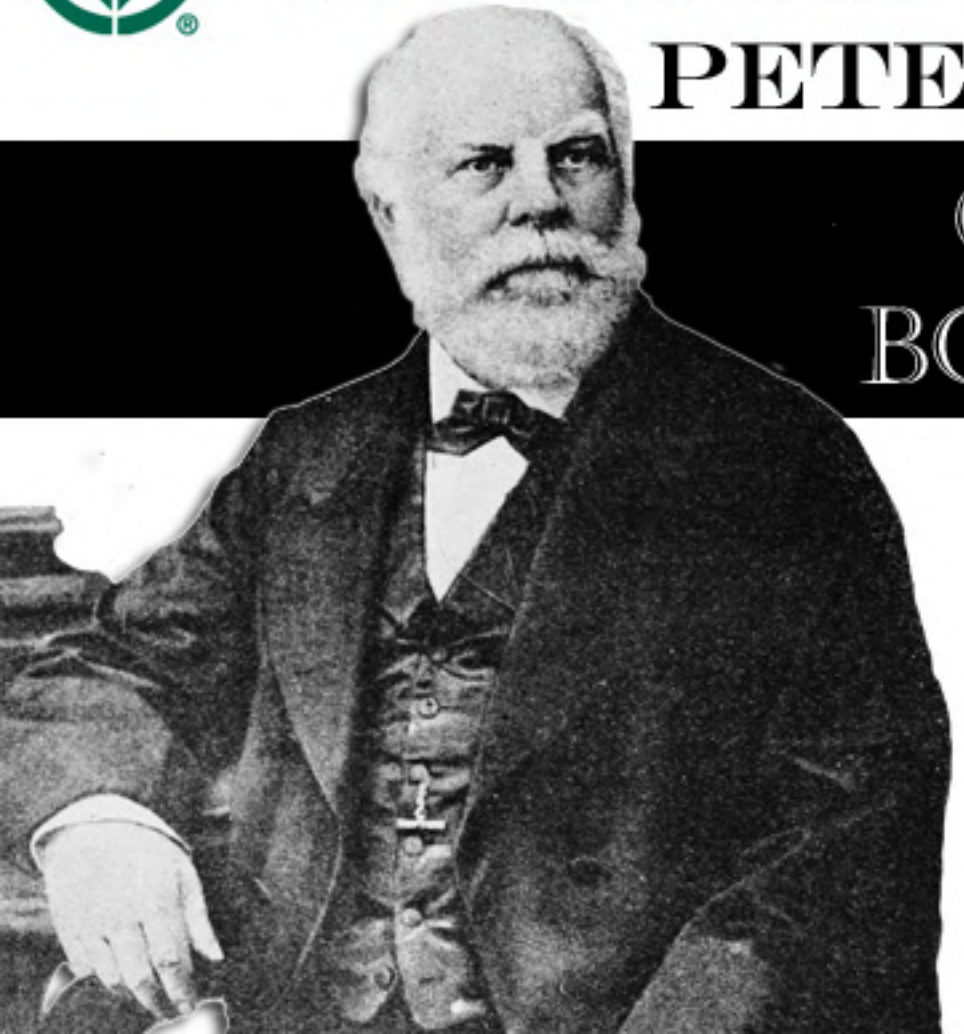

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1-30

456

Juglandaceae

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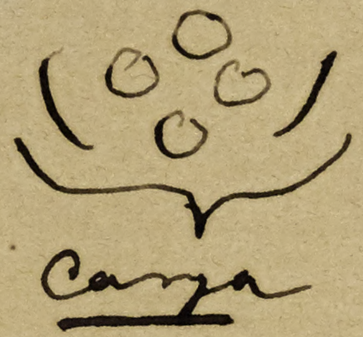
A Braun
13 Jan 1877



♂

Carya

bract and 2 prophylla
no calyx

Juglans

same, but more stamens
and 2 parted calyx

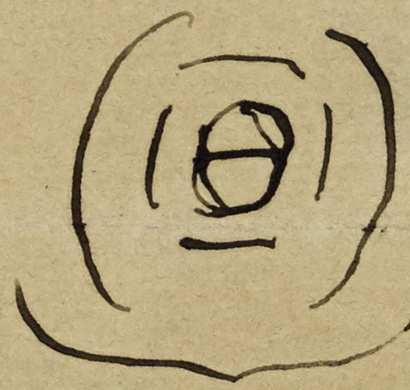
♀

Calyx & bract,
2 prophylla and
of adnate bract.

completely transverse

terminal leaflet articulate

pith continuous



bract, 2 prophylla
& parted Calyx all united

carpels median

not articulated

pith septate

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CLARA TITTMANN

RICHARD LOCHMANN

VERLOBTE.

CARLSRUHE. WIESBADEN.

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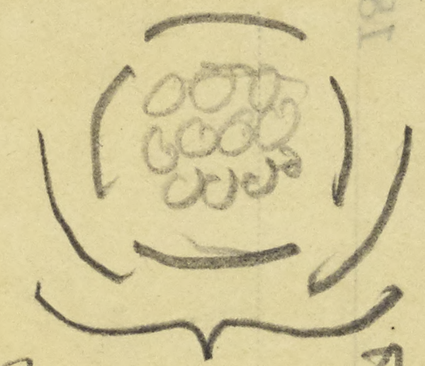
A Braun 13 Jan 1877

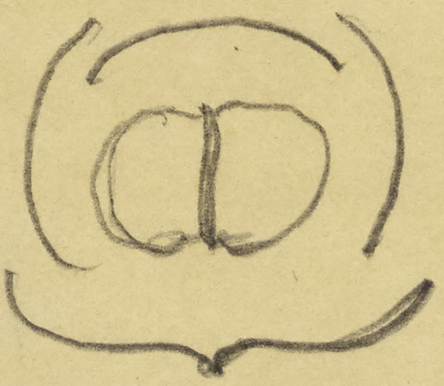
Carya ♂
Bract and 2 Vorblätter



Juglans ♂

Bract 2 Vor-
blätter
4 Calyx Lobes

Carya not — Juglans has septate medulla (pith)



Carpellary leaves transverse

Carya ♀
Calyx is formed of 4 organs
1 Bract 2 vorblatter
& 1 Vorgängers Blatt

Carpellary leaves median

Juglans ♀
Bract 1 2 Vorblatter
4 Calyx Lobes all 7
grown together

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and the Columbia; rather rare. Rumbol
Salt Lake; June, September. (426.)

CIRCÆA ALPINA, L., Var. INTERMEDI
erect, 3–10′ high; leaves slightly repar
bracts almost none; fruit 1-celled.—It is
Lutetiana, Var. *occidentalis*, of Nuttall, i
Lyall in the Galton Mountains, and by Bo
extends from the Northern States and Ca
and Sitka. Found in the Wahsatch Moun
July, August. (427.)

LOASACI

MENTZELIA ALBICAULIS, Dougl. Ste
base, white and polished and nearly gla
lanceolate, remote, more or less deeply si
flowers solitary or somewhat clustered, bi
light yellow, scarcely exceeding the short

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d Antelope Island and the Wahsatch,
, July. (430.)

6–10′ high, branching, pubescent,
anceolate, entire or pinnatifid, the
s, toothed, broadly ovate and em-
wers; petals 2″ in length, yellow,
alyx; stamens about 20; capsules
ected only by Nuttall in Southern
oyabe Mountains, east of Austin,
)

Tall, 2–3° high, stout, branching;
e; flowers large and showy, termi-
crowded; bracteoles none, or few
yellow, erect-spreading, lanceolate,
te sepals; stamens very many, the
s, winged.—Mature capsule 1′–1½′

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vernation
of
Carya alba

sect of terminal leaflet

April 29 77

(Gray Herbarium) (New England) (Museum of Comparative Zoology) (Harvard University)

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Leitch & Corlies

DRUGGISTS

Fifth and Market Streets

South West Corner

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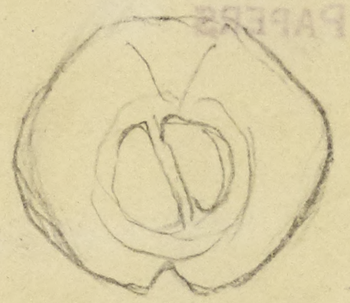
Carya alba

May 20 1877

upper lower side

diagr



sect of ovary

upper & lower stigma removed by stigmatic disc

lower most antholytical upper minute

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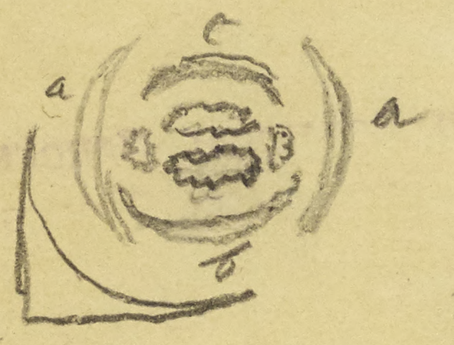
Carya tomentosa

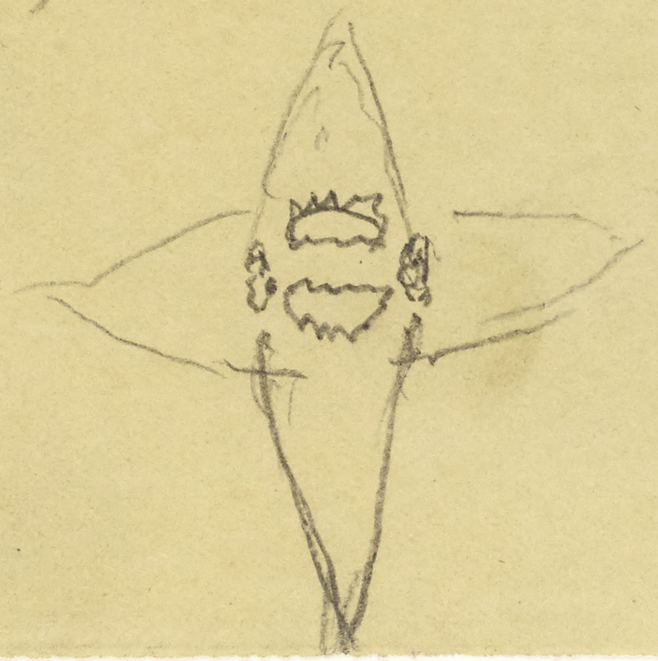
May 15 1877

bract
fem. fl. bud
b
a
c
bract
base of bract



two principal stigmata opposite posterior and anterior lobes of calyx
bract somewhat lateral or obliquely anterior lobe of calyx curved over posterior

bract is often a mere petiole or it has a little blade



Fab. Mus. Bot. Harvard University Herbaria 22 Divinity Avenue Cambridge, MA 02138-2020 USA

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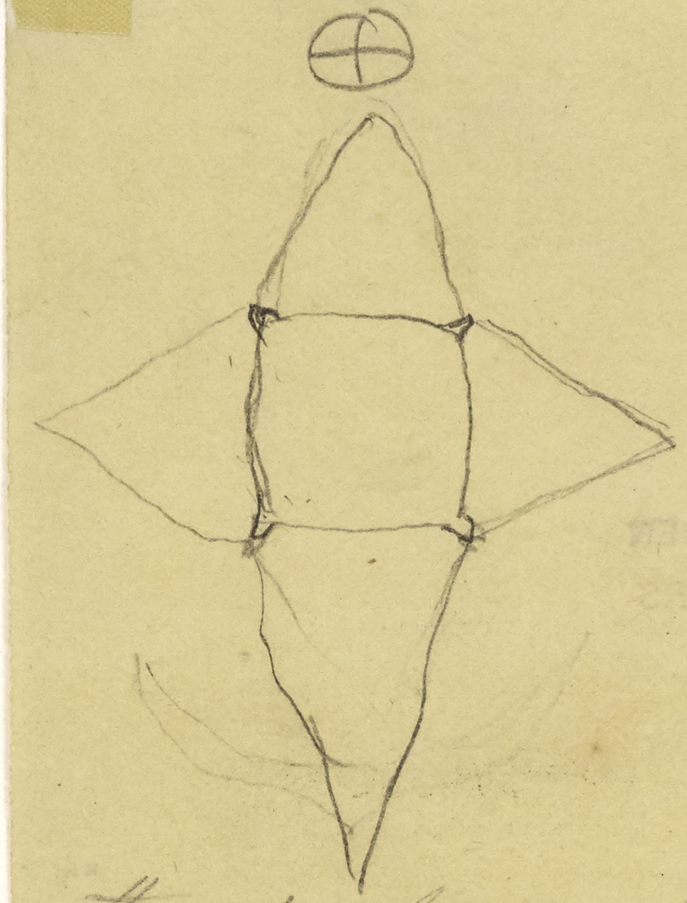
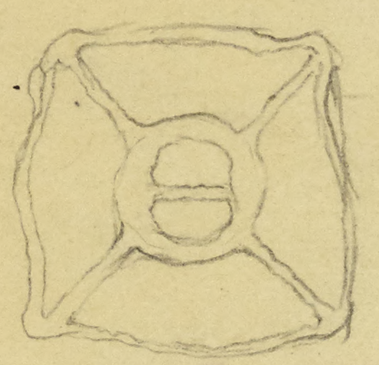
C. alba

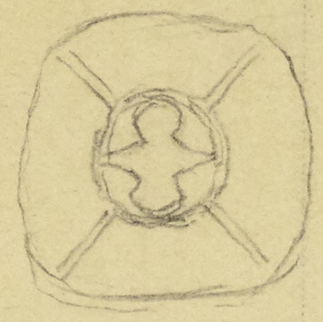
May 20 1877



the 4 leaves of the Calyx
form with their bases the
4 angled inferior Ovary
the angles formed by the
commissures of the Lobes

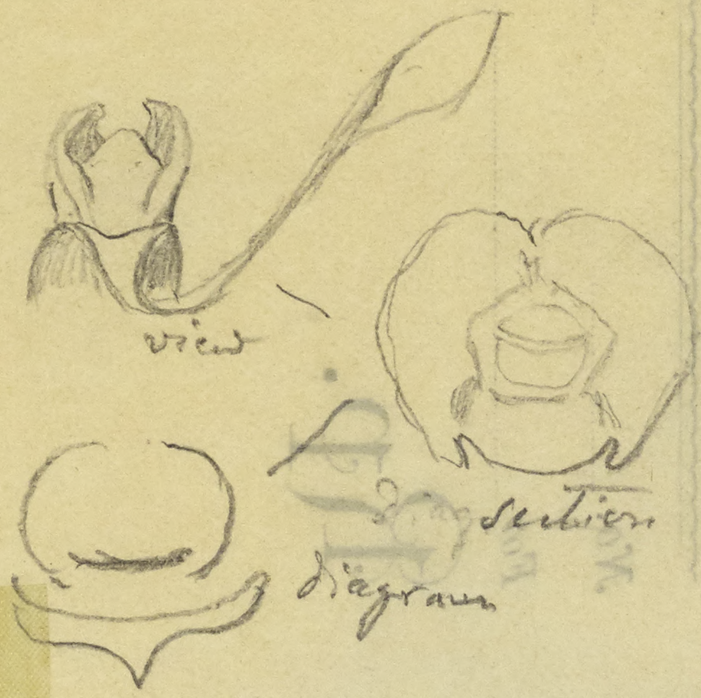


sect through upper part of



Trans Section of fruit

Trans Section



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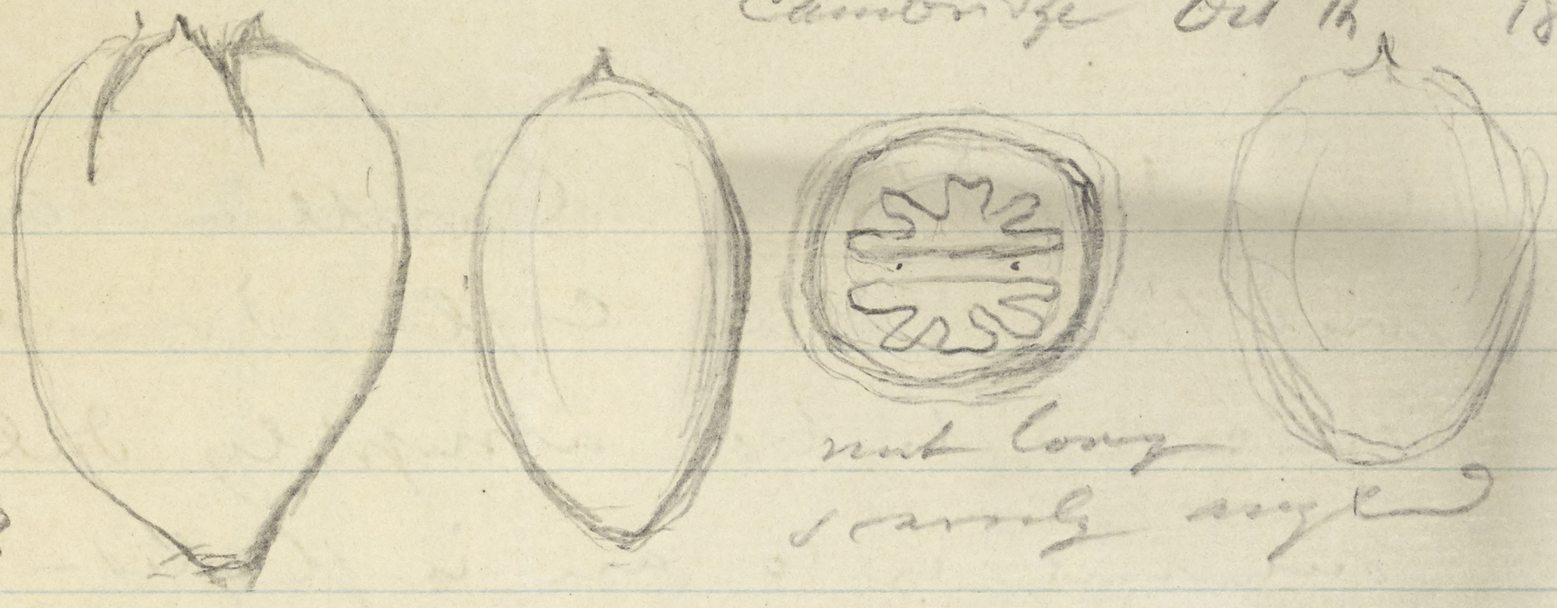
Cambridge Oct 11 1876

Carya porcina

Pennsylvania

Meehan

1858



nut long
scarcely angled

C. porcina Mt. Oaks, Mass with spreading teeth of flesh

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8 Mandevillea. Corolla ampla-fun=
nel form; the cylindrical or cylin=
dracous tube abruptly dilated at
summit into an inflated- or ample
~~bodied~~ oblong- campanulate throat,
~~or short~~

9 Echites. Corolla salver form; the fauci=

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June 25 1879

Carya sulcata Twigs gray.

buds

Leaflets 7, the last more or less petiolated (Soft hairy.
attenuate acute at base
the others sessile or short petiolate, mostly very oblique
and more or less cordate

Teeth more or less appressed or incurved, especially
in youth; stipitate pentrillate = pubescent on
the edges, dark mostly stoon glabate when
full grown; — pennately pubescent or lower
Aments at base of branchy with long linear deciduous
bracts, with long fuscous hair; calyx and
anthers sparsely hairy
female flower and peduncles pubescent
and slightly glandular

Carya sulcata in Coll. Jessup, N York Museum
(coll Letterman)

Bark 1½ inch
Sap. 1¾ – 2½ inch 45 – 55 rings
Heartwood about 250 rings, 13 inches radius
Bark deeply cracked, scarcely scaly
Sap now yellow – wood paler.
Diam of specimen 33 inches

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Dr. Engelmann

Dr Hodgen's
here together with
Dr G. Engelmann
will pass some time

E. H. Sonne

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1015

No 835/2

Carya Mexicana Eng. n sp. A large tree 50-60 feet high; winter buds ovate acute, about ¾ inch long, with pubescent scales, the outer acuminate, often with subulate points; leaflets in 4-5 ves, ovate-lanceolate, acuminate, terminal ones acute at base short-petioled, lateral ones sessile with an oblique semi-cordate base, sharply serrate with ascending or somewhat appressed serratures fringed-puberent serratures, puberent (even in ~~September~~ August) on the lower side, while (at that season at least) the petiole is glabrous, but compressed, about 1 inch long-Grades thus high, 4 angled, - Rusk thick 4-valved beyond the middle.

High Mountains of Abarey, 20 miles south east of San Luis Potosi 8000 feet high, S.E Palmer, Aether starre.— Near Carya alba, but with smaller buds, more puberent leaves. closer, more appressed serratures, leaflets about 4 inches long — 1½ wide, or sometimes almost twice as large; wood dense shaggy naked grown bark exfoliating scaly

Published in Hemsley

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Carya

= tomentosa sec Dr. Boyd

syn. sec DC. Prod 16.2 p. 142-5

Juglans alba Linn. Sp. 1 ed. (pl. 7; ed 2: pl 5. sec Richter pg 943

1737-1780 Wangenheim The only Hickory known to Linnaeus Juglans glabra ovata & obcordata (all to porcina ? Gray Man.)

1788 Walter H. Carol p. 235 has the Ed + Juglans alba pl. 7. tomentosa [= tomentosa ?]

1797 Lam Dict vol IV. Acad Juglans squamosa tomentosa cylindrica (= olivaeformis) Pecan ? pl 5 Linn [= porcina ?]

1803. Michaux H.B.A. vol 1 p. 192 Juglans olivaeformis

J. myristicaeformis

J. tomentosa = sulcata ? fide Dr Rusby

J. alba Linn

1804 Willd. sp. Pl. 4 (1805) { J. glabra / J. sulcata / J. compressa = alba

1810 Nuttall Lyon 1st part. J. olivaeformis

J. amara

J. aquatica

J. tomentosa

J. squamosa (alba)

J. laciniosa { sulcata

J. porcina { glabra Wild. fide Rusby more properly wangenheimiana

J. myristicaeformis

1816 Rusby H. vol 2. p. 636-8 has the same species and gives synonymy J. oliv. sulcat. alb. tomat amar. porc. aquat. myri-

1818 Nuttall Gen 2. p. 220 establishes the genus Carya

adds. C. microcarpa p. 221

1824 Elliott 2. p. 623 seq. has sulcata, alba, tomentosa, amara, porcina aquatica

1860 Chapman p. 418 & 19 has all 9 sp. of Nuttall + alb. sulcat. oli. tom. glabra & myristiciformis microc. myrist. amar. aquat.

Gray Man. mentions Juglans glabra as the oldest name but rejects therefore porcina and prefers Carya tomentosa Nutt

1864 Darlington Fl Cestr Carya Texana Nutt

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Mendocino Co., California. Dr. Kellogg,
no. 246 of Kellogg & Harford's distribution;
and Sierra Nevada Mariposa Co. near
Ostrander's, Bolander; the latter a
more slender form; the former larger
even than any ordinary European speci-
mens of P. palustris. The sets
vary from few up to 15 or 20 in the
phalanx in various specimens of P.
palustris, and not a little in different
blossoms from the same root. A notable
peculiarity of the present Californian
variety is found in the venation of the
petals: the veins all rise from a single
~~triple~~ triple bundle, which at the

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S. D. Dunkley in Bost. Soc. Phila. XII. 1860

p. 444 Carya Texana upper downy hairs on l
Texas large tree, 7–9 leaflets 6–8 thick long
bark thick, not scaly — smooth
Scheele ??

Hook. Ic. t. 1612 145 (1264) Carya Texana Cas DC., 1863
in Ann. Sc. nat. ser 4. vol 18, p. 33
Ch. Wright leg 1848. 49.
In Ann Sc. nat 18. 33 after the name is
given

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Dr Geo Engelmann
City

Sir

Find enclosed

5704

May 13 1877

Juglans nigra

Ohio

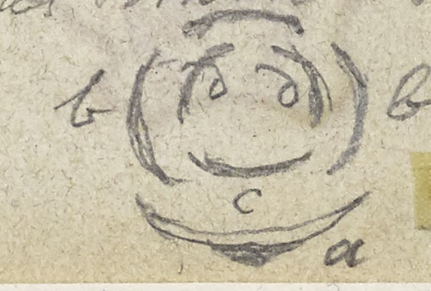
dr. woolly degidrom Gray

calyx 5(-6) petals

lobes unequal

stam 15 – 25

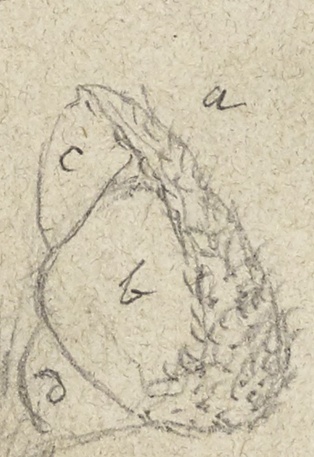
in other flowers
May 19th
always 6 lobes
as Braun has it



venation of leaflets

pith brown septate

one leaflet



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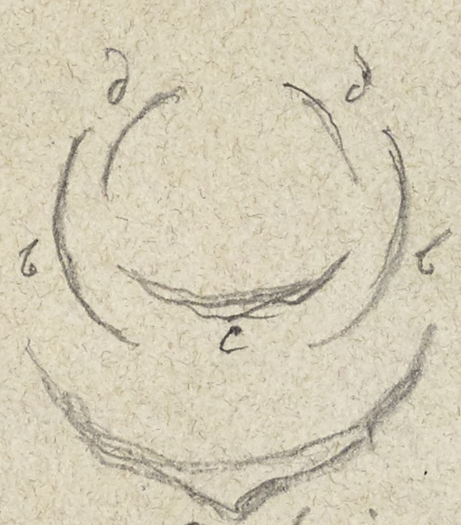

×10

very young fl bud 2 mm long

lateral view with brown woolly bract

a hairy bracteal scale

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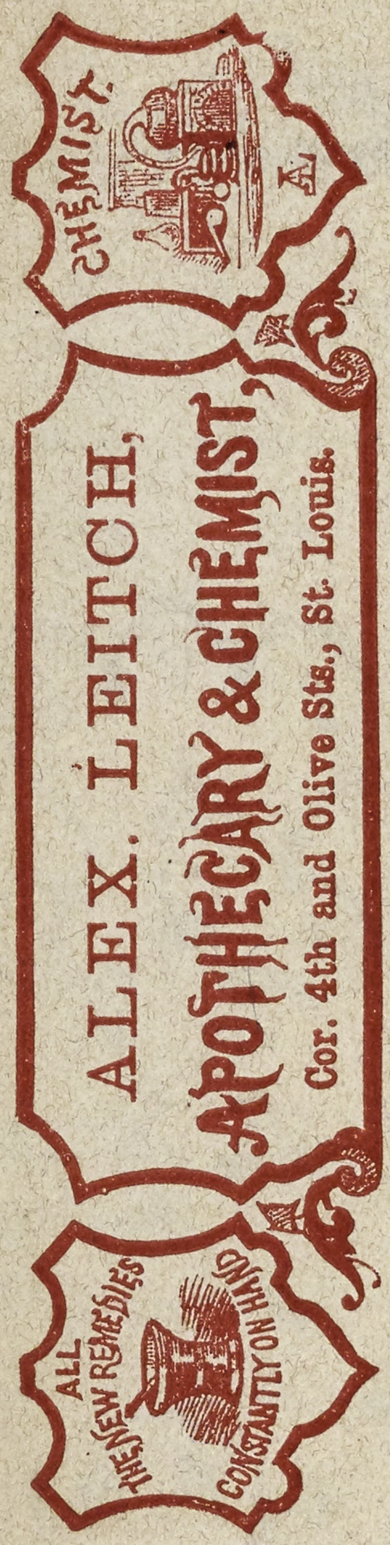

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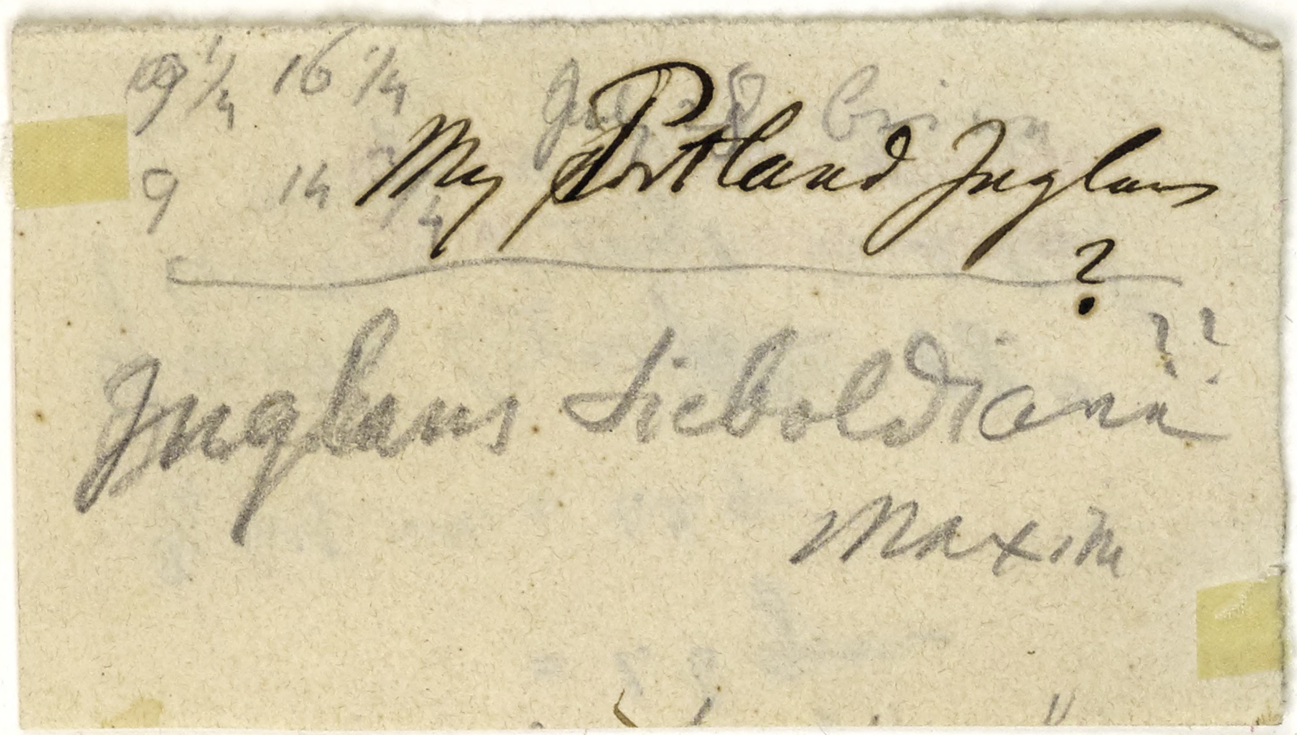

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= 1.6 Gram

3/4 Stück voll = 1.2 gr

Yucca baccata 18"

Collection June 1

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5706

Anglos California
Botanical San Francisco ; Hb Gray
(ok 1876) has male assts 6 - 7 or 8
inches by with loose flowers,

5707

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8. Mandevillea. Lindl. (For Henry John Mandeville, who sent to England M. suaveolens" Lindl., the "Chile Jasmine", now familiar in orna=

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835 Juglans Mollis Engelm. n. sp. (Medicus sic?) Large tree, with black bark and very dark heartwood; leaflets 11—13 ovate, acute, obtuse or subcordate at base, terminal one petioled, lateral ones subsessile and somewhat obliquer (the upper half being the widest), all closely doubly or irregularly serrate, tomentose underneath, at last almost glabrate above; nut depressed-globose, slightly compressed, with shallow grooves between flat ridges extending from base to top; shell and partitions very thick, scarcely smaller than the cavities between them

Mountains of Arizona, SE of San Luis Obispo 8000 feet alt., S. E. Palmer Sept 1878. — A tree apparently of slow growth, bark of the specimen sent home 1/2 inch thick; sap wood abt 1 inch thick, showing 30 annual rings, heartwood as dark as that of the Black Walnut. Leaves 8—10 inches long, leaflets 2 1/2 - 4 1/2 inches long by 1 1/4 - 2 inches wide, strongly ribbed underneath and soft pubescent to rusty-tomentose when young, ~~at last almost glabrate above~~. Nuts abt 1 1/3 inches broad and 1 1/4 inches high. — Allied to J. pubescens and J. Californica but with much larger nuts and broader, ~~tomentose~~ leaflets. The only other described Mexican species, J. pyriformis Liebm. — is said to have a very different form of nut, and many more leaflets (19—21).

Published in Hemsley

Synonym of Juglans Mexicana S. Wats.

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